## **NOVEMBER/DECEMBER 2024**

## 23UEMB32 — CLINICAL LABORATORY TECHNOLOGY (ELECTIVE III)

Time: Three hours

Maximum: 75 marks

SECTION A —  $(10 \times 2 = 20 \text{ marks})$ 

Answer ALL questions.

- 1. What does PPE stands for?
- List two hygiene practices essential in a clinical laboratory.
- 3. Name two methods used to collect blood specimens.
- Define amniotic fluid.
- 5. Name two types of fixatives used in tissue processing.
- 6. What is histochemical staining?
- 7. Define fibrinogen.
- 8. What are coagulation disorders?
- 9. What does ISO stand for?
- 10. What does COLA stand for?



## SECTION B $-(5 \times 5 = 25 \text{ marks})$

Answer ALL questions.

11. (a) Explain the basic laboratory principles to.
ensure accuracy in clinical diagnostics.

Or

- (b) Discuss the safety measures that must be taken in a clinical laboratory.
- 12. (a) Explain the separation of serum and plasma from blood.

Or

- (b) Describe the proper procedure for collecting blood specimens.
- 13. (a) List out the classification and properties of tissue fixatives used in histopathology.

Or

- (b) Outline the steps involved in paraffin block making and section cutting in histopathological tissue processing.
- 14. (a) Outline the routine laboratory methods used to investigate coagulation disorders.

Or

(b) Explain the process for estimating fibrinogen . levels in a clinical laboratory.

15. (a) List out the importance of quality assessment in the pre-analytical phase of laboratory testing.

Or

Discuss the significance of implementing quality control measures in the post-analytical phase of testing.

SECTION C —  $(3 \times 10 = 30 \text{ marks})$ 

Answer any THREE questions.

- 16. Discuss the code of conduct for medical laboratories and its importance.
- 17. Explain about collection and processing of urine specimens.
- 18. Elaborate on the various methods used to examine tissues and cells in histopathology.
- 19. Outline the steps involved in the laboratory diagnosis of bleeding disorders.
- Explain the role of accreditation bodies in maintaining quality standards in health laboratories.